

## PROCEEDINGS OF THE NEW YORK ENTO- MOLOGICAL SOCIETY

MEETING OF JANUARY 15, 1935

The annual meeting of the Society was held on January 15, 1935 in the American Museum of Natural History. Mr. Bell presided in the absence of Vice-President Schwarz. Thirty members and twenty-four visitors were present.

The treasurer gave an unaudited report for the year 1934. It was referred to the auditing committee.

The Nominating Committee submitted its report and the following officers were elected for 1935.

President .....	Mr. H. F. Schwarz
Vice-President .....	Dr. H. Ruckes
Treasurer .....	Mr. G. C. Hall
Secretary .....	Mrs. Geo. B. Engelhardt
Librarian .....	Mr. F. E. Watson
Curator .....	Mr. A. J. Mutchler

### Executive Committee

Mr. Wm. T. Davis	Dr. F. E. Lutz
Dr. H. Spieth	Mr. Henry Bird

### Publication Committee

Mr. H. B. Weiss	Dr. C. W. Long
Mr. J. D. Sherman Jr.	Dr. C. H. Curran

The following committees had been appointed by the President-elect: Program Committee; A. B. Klots, Harry B. Weiss, J. L. Horsfall. Auditing Committee; E. I. Huntington, F. Johnson, Dr. E. R. P. Janvrin. Field Committee; Herman Moennich and A. S. Nicolay. Delegate to the N. Y. Academy of Sciences, Wm. T. Davis.

In the absence of President Schwarz, Vice-President Ruckes then took the chair.

Dr. R. H. LePelley, the economic entomologist of the Government Experiment Station at Kenya Colony, Africa, was called on to say a few words. Dr. LePelley expressed his pleasure at being present and gave a general description of Kenya Colony, its geography and the climatic of Nairobi. There being no winter season, there is no hibernation of animals. The main crop is coffee which has four or five major pests, the greatest of which is a mealy bug. Kenya suffers greatly from three species of migratory locusts. A large flight of the purple locust, *Locusta migratoria*, has a three mile front and is fifty feet high. This migration is something to be seen by an entomologists as the insects fly at a speed of ten miles an hour and it requires three days for the swarm to pass a certain point. The droppings of such a swarm assume the proportions of a hail storm. When the swarm settles in the forest, the crashing of falling branches and trees may be heard at

some distance as they are broken by the weight of the number of insects alighting on them.

Mr. and Mrs. M. R. Frank of Jackson Heights, New York, were elected active members of the Society.

Dr. G. W. Kidder of the College of the City of New York read his paper on "Cellulose Digestion in Insects and the Question of Microörganism Symbiosis."

Following Dr. Kidder's paper there was a general discussion of its contents by Messrs Asmuth, Moore, Ruckes, Klots, Hamilton, and Tompkins.

ELIZABETH S. ENGELHARDT, *Secretary*.

#### MEETING OF FEBRUARY 5, 1935

A regular meeting of the Society was held on February 5, 1935, in the American Museum of Natural History; Vice-President Ruckes in the chair with nineteen members and sixteen visitors present.

Mr. C. D. Vreeland of Little Falls, New Jersey, was proposed for active membership in the Society by Miss Dobrosecy.

Dr. Alfred F. Huettner of New York University read his paper on the "Life History of *Miastor americana*." Dr. Huettner illustrated his remarks with lantern slides. An abstract of this paper will appear in the Proceedings of the Society.

Dr. Huettner's interesting paper was discussed at some length by Messrs. Ruckes, Felt, Curran, Klots, Crawford and others.

E. S. ENGELHARDT, *Secretary*.

#### MEETING OF FEBRUARY 19, 1935

A regular meeting of the Society was held on February 19, 1935, in the American Museum of Natural History; Vice-President Ruckes in the chair with twenty-two members and seventeen visitors present.

Mr. C. D. Vreeland was elected a member of the Society.

Dr. Ralph Voris of State Teachers College, Springfield, Missouri, and Mr. Max Kisiuk, Jr., 844 Federal Building, Christopher Street, New York City, were proposed for active membership in the Society.

Upon motion duly seconded the By-Laws were suspended and Mr. Kisiuk was elected a member of the Society.

Dr. Loren B. Smith of the Chipman Chemical Company read his paper on "Recent Trends in the Control of Plant Pests." Dr. Smith gave the history of the use of insecticides in this country beginning with the year 1850 when the Colorado potato beetle began to spread eastward and a paint company found that it had a compound known as Paris green which would kill these insects. Lead arsenate was first used in Connecticut in 1890 in attempts to control the Gypsy moth. The insoluble arsenites such as lead arsenate, calcium arsenate and Paris green are stomach poisons. The soluble arsenical, sodium arsenate, is used in grasshopper control. The contact poisons such as nicotine, soaps, and lime sulphur are widely used. Tar oil washes and cresylic acid (used in aphid control) are not for general and indiscriminate use. The value of tar oil washes is still an open question. Dr. Smith men-

tioned pyrethrum as an age-old insecticide which has come again into use within the last two decades. In closing, Dr. Smith declared that, in his opinion, the future of the development of insecticides is not very hopeful, as an insecticide that saves the plant or fruit may be detrimental to the consumer; also, that progress along investigational lines is bound to be slow; and finally, up to the present time there has been too much experimenting with chemicals and not enough research.

Dr. Smith's paper was discussed by Messrs. Ruckes, Curran, Moore, Kisliuk, Hartzell, Crawford, Safro, and Vreeland.

Mr. Safro said, in part, that there were men present who had made insecticide history. He mentioned Dr. Smith's wide and exhaustive work; Dr. Vreeland's patent for the manufacture of dry arsenate of lead; and Dr. Hartzell's work on the action of contact insecticides.

E. S. ENGELHARDT, *Secretary*.

#### MEETING OF MARCH 5, 1935

A regular meeting of the Society was held on March 5, 1935, in the American Museum of Natural History; Vice-President Ruckes in the chair with twenty-seven members and twenty visitors present.

Dr. Ralph Voris of State Teachers College, Springfield, Missouri, was elected an active member of the Society.

The following were proposed for active membership:

Mr. William Procter,  
430 Park Ave.,  
New York, N. Y.

Miss Marjorie Schwarz  
1111 Park Ave.,  
New York, N. Y.

The Society was honored in having Mr. and Mrs. Pallister of Cleveland present at the meeting.

Dr. R. W. Glaser of the Rockefeller Institute for Medical Research at Princeton, New Jersey, gave the paper of the evening entitled "Neoaplectana glaseri (Oxyuridae), a Nematode Parasite of the Japanese Beetle." Dr. Glaser illustrated his remarks with lantern slides. An abstract of his paper follows:

The life cycle of a new nematode parasite of Japanese beetle grubs was described and its method of invasion into and effect upon the insects studied. The nematodes develop well on a special artificial medium and produce from 21 to 31 generations over a period of from 16 to 18 weeks. Both small and large parasite introduction experiments with cultures were performed in southern New Jersey. The nematodes became established, spread over and beyond the experimental area, and produced a high mortality among Japanese beetle grubs. The field work was done in a quantitative manner and the results were treated statistically, so that a fairly accurate appraisal of the effect of the parasite was possible.

Dr. Stunkard of New York University discussed Dr. Glaser's paper; also Dr. Henry Fox, Mr. Safro, Dr. Klots, Miss Dobrosky, and Dr. Ruckes.

ELIZABETH S. ENGELHART, *Secretary*.

## MEETING OF MARCH 19, 1935

A regular meeting of the Society was held on March 19, 1935, in the American Museum of Natural History; President Schwarz in the chair with twenty-six members and thirty-seven visitors present.

The following were elected active members of the Society:

Mr. William Procter,  
430 Park Ave.,  
New York, N. Y.

Miss Marjorie Schwarz  
1111 Park Ave.,  
New York, N. Y.

Mr. Max Kisliuk, Jr., of the United States Department of Agriculture, Bureau of Entomology and Plant Quarantine, then gave the talk of the evening on "Some Experiences in Foreign Countries Surveying for Plant Pests especially Fruit Flies." Mr. Kisliuk described his first search for fruit flies in the grapes and tomatoes being shipped to this country in 1927, when he made an extensive survey of the province of Almeria in southern Spain, and also of the Canary Islands. In 1931-32, he made a final tour through the West Indies, down the Eastern coast of South America across Argentina, and up the western coast of Chile, in the company of C. E. Cooley of same Bureau as Mr. Kisliuk.

Mr. Kisliuk illustrated his interesting talk with lantern slides.

ELIZABETH S. ENGELHART, *Secretary*.

## MEETING OF APRIL 2, 1935

A regular meeting of the Society was held on April 2, 1935, in the American Museum of Natural History; President Schwarz in the chair with twenty-one members and fourteen visitors present.

Mr. Frances McGuigan, of 162 Fairview Ave., Jersey City, New Jersey, was proposed for active membership in the Society.

Mr. A. C. Scott of the Department of Zoology of Columbia University gave the talk of the evening entitled "Peculiarities in the Life History and Development of a Pædogenic Beetle. (*Micromalthus debilis* LeC.)"

Mr. Scott illustrated his remarks with lantern slides.

After a general discussion of Mr. Scott's paper the meeting was adjourned.

ELIZABETH S. ENGELHART, *Secretary*.

## MEETING OF APRIL 16TH, 1935

A regular meeting of the Society was held on April 16th, 1935, in the American Museum of Natural History; President Schwarz in the chair with twenty-nine members and eighteen visitors present.

Mr. Frances McGuigan, of New York City, was elected an active member of the Society.

Dr. J. L. King, of the U. S. D. A., Bureau of Entomology and Plant Quarantine at Moorestown, New Jersey, read his paper on the "Present Status of the Parasites of the Japanese Beetle." Dr. King led an expedition to Japan to ascertain how the insect was kept in check there. However, the beetle was traced with difficulty, although Dr. Kuwana, the Imperial Entomologist of Japan, made every effort to help find infestations. In Japan, the beetle, a pest on soy bean, is known as the bean beetle. Infestations and parasites were found at Sapporo in Hokkaido. Three tachinid parasites were abundant in Japan but did not react favorably to the climate of North America. The hymenopterous parasites, *Tiphia popilliavora*, *T. autumnalis*, and *T. vernalis* were reared and imported successfully into this country. On Dr. King's return to America in 1924, his work in Japan was extended through China and northern India. Since then, twenty-four species of insects parasitic on the Japanese Beetle in the Orient have been imported to America; of these only sixteen species have been reared and liberated; only five species have been established successfully. Dr. King spoke of the development in method and equipment used to rear and spread these parasites in this country. With the spread of the beetle in this country, it is hoped that parasites can be established. Slides illustrating the liberation of colonies of *Tiphia* and the methods and equipment used in importing and rearing the parasites were shown.

A general discussion of Dr. King's interesting paper followed.

ELIZABETH S. ENGELHART, *Secretary*.

#### MEETING OF MAY 7, 1935

A regular meeting of the Society was held on May 7, 1935, in the American Museum of Natural History; President Schwarz in the chair with nineteen members and seven visitors present.

Mr. George Rowe, of the New York Botanical Gardens issued an invitation to the members of the Society to visit the Botanical Gardens on Saturday, May 18, in order to inspect the tropical scale insects to be found in the greenhouses. As it was impossible to announce this invitation in the Bulletin, it was decided to postpone this trip until the fall when it was hoped that more members could take advantage of it.

Dr. Henry Fox, of New York University, gave some remarks on the "Spread of the Japanese Beetle in the United States." He described the two methods of distribution: one by the natural spread of the insect through flight from Riverton, New Jersey; and the other, an artificial means in motor vehicles and railroad cars. Slides were shown illustrating the area of continuous distribution from Riverton by natural spread; and the area of discontinuous distribution established by means of artificial conveyances. Maps showing the distribution in 1919 and the spread for the years 1925-1934 were also shown. The natural rate of spread of the insect is very slow. Dr. Fox stated that the favorable conditions to breeding were found in low-lying, level country where the land is cultivated. Dr. Fox then gave a short discussion concerning the future spread of the insect.

ELIZABETH S. ENGELHART, *Secretary*.